

REMARKS/ARGUMENTS

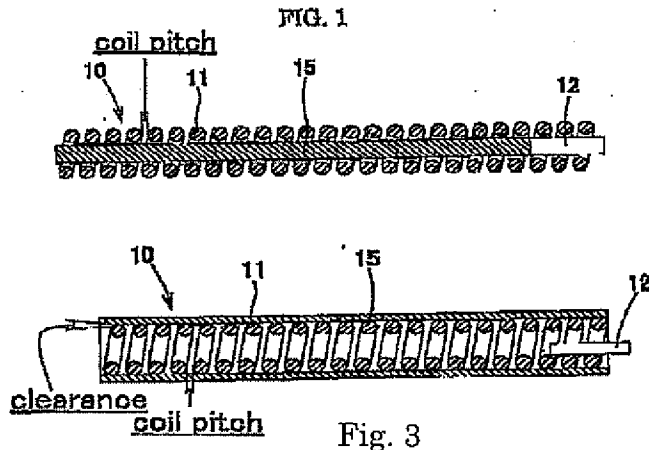
This application has been carefully reviewed in light of the Office Action dated March 27, 2009. Claims 1-5 and 8-12 are pending. Claims 1 and 11 are the independent Claims. Claims 1 and 11 are amended. New claim 12 is added. Reexamination and reconsideration of the application, as amended, are respectfully requested.

The present invention relates to an embolus forming in-vivo indwelling coil. (Applicant's published specification, at paragraph 0001 and FIG. 1).

DRAWINGS

The drawings are objected to under 37 CFR 1.83(a). The Office states that the "clearance" and "coil pitches" in claim 1 must be shown or the feature(s) canceled from the claim(s). In response, Applicant submits that the feature of a stretch suppressing member entering the "coil pitches" of the coil main body is clearly disclosed in the original drawings and specification. In particular, paragraph 0019 and 0048 defines the coil pitch as the wire spaces of the wire turns and corresponding FIGs. 2 and 4 clearly illustrate the stretch suppressing member entering the coil pitches of the coil main body.

With respect to a claimed "clearance," applicant's paragraph 0017 defines the clearance as "between the outer periphery of the coil main body and the inner periphery of the stretch suppressing member is preferably 0 to 100 μm ." Therefore, the clearance includes 0 μm where the outer periphery of the coil and the inner periphery of the stretch suppressing member may contact each other. FIGs. 1 and 3 reproduced below further clarify these features. Withdrawal of this objection is thus respectfully requested.



CLAIM OBJECTIONS

Claim 1 is objected to for a minor informality. In response, claims 1 and 11 are amended to recite "inner periphery" as suggested by the Office. Withdrawal of this objection is thus respectfully requested.

CLAIM REJECTIONS UNDER 35 U.S.C. § 112

Claim 10 stands rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The Office states that support for the feature of "wherein the stretch supporting member extends over the entire region of the coil main body" is asserted to not be found in the original specification. Applicant respectfully disagrees. Paragraph 0040, 0041 and FIG. 3 of Applicant's Published Application states that "the stretch suppressing member 15 is preferably disposed to extend over the entire region of the coil main body 11" (emphasis added). For at least this reason, the withdrawal of this rejection is respectfully requested.

Claims 1-5 and 8-11 stand rejected under 35 U.S.C. § 112, second paragraph, for indefiniteness. In response, claims 1 and 11 are amended to recite proper antecedent basis.

Furthermore, applicant submits that the phrases “means for separating” and “means for suppressing” properly invoke 35 USC 112, sixth paragraph, as means plus function language is recited. The phrases “for separating a coil” and “for suppressing stretch” clearly express functional language following the “means” clause and does not precede the “means” clause as asserted in the Action. In this manner, a “means for entering” clearly invokes 35 USC 112, sixth paragraph. Withdrawal of this rejection is thus respectfully requested.

CLAIM REJECTIONS UNDER 35 U.S.C. § 102

Claims 1, 2, 4 and 8-11 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Greene Jr., et al (US 2002/0177855). Applicant respectfully traverses this rejection and amends claims 1 and 11 to clearly distinguish over Greene Jr.

Claim 1 reads as follows:

An embolus forming in-vivo indwelling device comprising a coil separating member and a coil main body having flexibility and a stretch suppressing member which is provided on only one of either an inner periphery or an outer periphery of the coil main body and which is made of a water-swallowable polymer material for suppressing stretch of the coil main body by swelling with absorbed water,

wherein in a case that the dry stretch suppressing member is provided only on the inner periphery of the coil main

body, the stretch suppressing member has a smaller diameter than the coil diameter of the coil main body or in a case that the dry stretch suppressing member is provided only on the outer periphery of the coil main body, the stretch suppressing member has a clearance between the outer periphery of the coil main body and the inner periphery of the stretch suppressing member, and the stretch suppressing member enters coil pitches of the coil main body as a result of swelling.

Applicant respectfully submits that Greene Jr. does not disclose each and every element of amended claim 1. In particular, Greene Jr. fails to teach or suggest "a stretch suppressing member which is provided on only one of either an inner periphery or an outer periphery of the coil main body and which is made of a water-swellaable polymer material for suppressing stretch of the coil main body by swelling with absorbed water."

As shown in FIG. 40A of Greene Jr., the embolization device 400 is provided with both an inner and an outer periphery polymer 418 on the carrier 402. There is no disclosure of a polymer 418 provided on only one of either an inner periphery or an outer periphery of a carrier 402.

The present invention as described above provides an indwelling coil with deformability in a swollen state such that flexibility of the coil main body is not significantly inhibited by the stretch suppressing member (paragraph 0055). As disclosed in paragraph 0012, the embolus forming in-vivo indwelling device needs high flexibility to provide sufficient safety and operability. Consequently, the in-vivo indwelling coil 10 can be securely introduced and indwelled at the

predetermined position through the appropriate catheter (paragraph 0020). Claim 11 recites a similar limitation as Claim 1. In particular, Claim 11 now recites:

An embolus forming in-vivo indwelling device comprising a coil separating member and a coil main body having flexibility and means for entering coil pitches in only one of either an inner periphery or an outer periphery of the coil main body to create a state in which adjacent wire turns are substantially connected to each other as a result of swelling.

In light of the foregoing, Applicant respectfully submits that the cited references do not anticipate claims 1 and 11, because the cited reference fails to teach each and every claim limitation. Withdrawal of this rejection is thus respectfully requested.

CLAIM REJECTIONS UNDER 35 U.S.C. § 103

Claims 1-5 and 11 stand rejected under 35 U.S.C. § 103(a) as obvious over Ogawa (US 5,846,210) in view of Ken (US 5,853,418). Applicant respectfully traverses the rejection.

Ogawa is cited for teaching a joint member 15 between an implanted device 16A and a coiled distal part 14 (page 3 of Office Action). Importantly, the joint member 15 is fixedly connected to the coil piece by an adhesive (col. 6, lines 62-67) such that the joint member 15 does not have the high flexibility necessary, and is unable, to enter the coil pitches of the coil main body as a result of swelling.

In contrast, the present invention requires “a stretch suppressing member which is provided on only one of either an inner periphery or an outer periphery of the coil main body and which is made of a water-swellaable polymer material for suppressing stretch of the coil main body by swelling with absorbed water,” and “the stretch suppressing member enters coil pitches of the coil main body as a result of swelling.”

Furthermore, the claimed stretch suppressing member and the coil separating member are both separate elements having separate functions. In Ogawa, the joint member 15 is melted when the implanted device is detached. Therefore, with respect to dependent claims 8-10, one of ordinary skill in the art would fail to modify Ogawa's joint member 15 to extend over an entire region of the coil main body as taught by Ken for simultaneous use as the stretch suppressing member and the coil separating member.

In light of the foregoing, Applicant respectfully submits that the cited references cannot render claims 1 and 11 obvious, because the cited references fail to teach or suggest each and every claim limitation. Withdrawal of this rejection is thus respectfully requested.

NEW CLAIM

New dependent claim 12 is added to better define the invention and is submitted as allowable over the art of record. Support for new claim 12 is found in FIGs. 1 and 3.

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Amdt. Dated July 27, 2009
Reply to Office Action of March 27, 2009

Attorney Docket No. 81844.0038
Customer No.: 26021

CONCLUSION

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested.

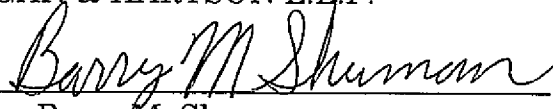
If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California telephone number (310) 785-4600 to discuss the steps necessary for placing the application in condition for allowance.

If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-1314.

Respectfully submitted,
HOGAN & HARTSON L.L.P.

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By:



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